

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An airbag module for protecting a vehicle occupant comprising:

an airbag inflator;

an airbag cushion, the airbag cushion having a cushion throat, a windshield face, an occupant face, an inboard face, and an outboard face; and

a one-piece clamshell inflator housing, the inflator housing comprising an inflator sleeve and a diffuser sleeve, the inflator sleeve being configured to receive and close about the airbag inflator, the diffuser sleeve formed from a first sleeve wall and a second sleeve wall that contact each other, wherein the first and second sleeve walls contact each other on the interior of the airbag cushion, wherein an outlet port of the airbag inflator extends into the diffuser sleeve such that the diffuser sleeve directs inflation gas produced by the inflator, wherein the diffuser sleeve is substantially transverse to the inflator sleeve.

Claim 2 (original): The airbag module of claim 1, wherein the cushion throat of the airbag cushion comprises a loop diffuser.

Claim 3 (original): The airbag module of claim 2, wherein the loop diffuser comprises a secondary internal sleeve of the cushion throat having at least one diffuser orifice.

Claim 4 (original): The airbag module of claim 1, wherein the cushion throat of the airbag cushion is configured to be coupled to the inflator housing.

Claim 5 (original): The airbag module of claim 1, wherein the inflator housing further comprises cushion attachments.

Claim 6 (original): The airbag module of claim 5, wherein the cushion attachments are attachment pegs.

Claim 7 (cancelled)

Claim 8 (original): The airbag module of claim 1, wherein the diffuser sleeve is formed by closing the clamshell inflator housing.

Claim 9 (previously presented): The airbag module of claim 1, further comprising fasteners for maintaining the clamshell inflator housing in a closed position.

Claim 10 (previously presented): The airbag module of claim 1, wherein the airbag cushion is folded using a method comprising the steps of:

flattening the windshield face and the occupant face of the airbag cushion;

tucking the inboard and outboard faces of the airbag cushion inwardly to produce at least one longitudinal pleat and a first folded end and a second folded end;

drawing the first and second folded ends of the airbag cushion toward each other to position them directly opposite the inflation orifice;

rolling the first folded end of the airbag cushion toward the inflation orifice to produce a first roll fold; and

rolling the second folded end of the airbag cushion toward the inflation orifice to produce a second roll fold, wherein the second roll fold encompasses the first roll fold.

Claim 11 (currently amended): An overhead airbag module for protecting a vehicle occupant comprising:

an airbag inflator;

an overhead airbag cushion, the airbag cushion having a cushion throat, a windshield face, an occupant face, an inboard face, and an outboard face; and

a one-piece clamshell inflator housing, the inflator housing comprising an inflator sleeve and a diffuser sleeve, the inflator sleeve being configured to receive and close about the airbag inflator, the diffuser sleeve formed from a first sleeve wall and a second sleeve wall that contact each other, wherein the first and second sleeve walls contact each other on the interior of the airbag cushion, wherein an outlet port of the airbag inflator extends into the diffuser sleeve such that the diffuser sleeve directs inflation gas produced by the inflator, wherein the diffuser sleeve is substantially transverse to the inflator sleeve.

Claim 12 (original): The overhead airbag module of claim 11, wherein the cushion throat of the overhead airbag cushion comprises a loop diffuser.

Claim 13 (original): The overhead airbag module of claim 12, wherein the loop diffuser comprises a secondary internal sleeve of the cushion throat having at least one diffuser orifice.

Claim 14 (original): The overhead airbag module of claim 11, wherein the cushion throat of the overhead airbag cushion is configured to be coupled to the inflator housing.

Claim 15 (original): The overhead airbag module of claim 11, wherein the inflator housing further comprises cushion attachments.

Claim 16 (original): The overhead airbag module of claim 15, wherein the cushion attachments are attachment pegs.

Claim 17 (cancelled)

Claim 18 (original): The overhead airbag module of claim 11, wherein the diffuser sleeve is formed by closing the clamshell inflator housing.

Claim 19 (original): The overhead airbag module of claim 11, further comprising fasteners for maintaining the clamshell inflator housing in a closed position.

Claim 20 (original): The overhead airbag module of claim 11, wherein the airbag cushion is folded using a method comprising the steps of:

flattening the windshield face and the occupant face of the airbag cushion;

tucking the inboard and outboard faces of the airbag cushion inwardly to produce at least one longitudinal pleat and a first folded end and a second folded end;

drawing the first and second folded ends of the airbag cushion toward each other to position them directly opposite the inflation orifice;

rolling the first folded end of the airbag cushion toward the inflation orifice to produce a first roll fold; and

rolling the second folded end of the airbag cushion toward the inflation orifice to produce a second roll fold, wherein the second roll fold encompasses the first roll fold.

Claim 21 (currently amended): An airbag module comprising:

an airbag cushion having a throat portion and a cushion portion, the throat portion further comprising a loop diffuser; and[.]

a diffuser sleeve formed from a first sleeve wall and a second sleeve wall that contact each other, wherein an outlet port of an airbag inflator extends into the diffuser sleeve such that the diffuser sleeve directs inflation gas produced by the inflator, wherein the first and second sleeve walls contact each other on the interior of the airbag cushion, wherein the diffuser sleeve is substantially transverse to the inflator sleeve.

Claim 22 (previously presented): The airbag module of claim 21, wherein the loop diffuser comprises an internal sleeve having at least one diffuser orifice to allow passage of an inflation gas between the throat portion and the cushion portion of the airbag cushion.

Claim 23 (previously presented): The airbag module of claim 22, wherein the internal sleeve of the loop diffuser has a windshield-facing panel and an occupant-facing panel, the panels being attached to form a closed sleeve.

Claim 24 (previously presented): The airbag module of claim 23, wherein the internal sleeve of the loop diffuser comprises at least one diffuser orifice on the occupant-facing panel.

Claim 25 (previously presented): The airbag module of claim 23, wherein the internal sleeve of the loop diffuser comprises at least one diffuser orifice on the windshield-facing panel.

Claim 26 (previously presented): The airbag module of claim 23, wherein the internal sleeve of the loop diffuser comprises at least one diffuser orifice on the occupant-facing panel and on the windshield-facing panel.

Claim 27 (previously presented): The airbag module of claim 21, wherein the airbag cushion is an overhead airbag cushion.

Claim 28 (withdrawn): A folding method for an overhead airbag cushion comprising the steps of:
providing an airbag cushion having a windshield face, an occupant face, an inboard face, an outboard face, and an inflation orifice;

flattening the windshield face and the occupant face of the airbag cushion;

tucking the inboard and outboard faces of the airbag cushion inwardly to produce at least one longitudinal pleat and a first folded end and a second folded end;

drawing the first and second folded ends of the airbag cushion toward each other to position them directly opposite the inflation orifice;

rolling the first folded end of the airbag cushion toward the inflation orifice to produce a first roll fold; and

rolling the second folded end of the airbag cushion toward the inflation orifice to produce a second roll fold, wherein the second roll fold encompasses the first roll fold.

Claim 29 (withdrawn): The folding method of claim 28, wherein the step of tucking the inboard and outboard faces of the airbag cushion inwardly to produce at least one longitudinal pleat is repeated to produce a plurality of longitudinal pleats.

Claim 30 (withdrawn): The folding method of claim 29, wherein 2 longitudinal pleats are produced.

Claim 31 (withdrawn): The folding method of claim 28, wherein the step of rolling the first folded end of the airbag cushion toward the inflation orifice comprises rolling the first folded end against the windshield face of the airbag cushion.

Claim 32 (withdrawn): The folding method of claim 28, wherein the step of rolling the second folded end of the airbag cushion toward the inflation orifice comprises rolling the first folded end against the occupant face of the airbag cushion.

Claim 33 (withdrawn): An airbag module comprising an airbag cushion folded according to the method of claim 28.

Claim 34 (withdrawn): An overhead airbag module assembled according to a method comprising the steps of:

- providing an airbag cushion having a windshield face, an occupant face, an inboard face, an outboard face, and a cushion throat with an inflation orifice;

- providing an inflator housing for receiving and retaining an airbag inflator, the inflator housing including at least one cushion attachment;

- attaching the cushion throat of the airbag cushion to the inflator housing;

- flattening the windshield face and the occupant face of the airbag cushion;

tucking the inboard and outboard faces of the airbag cushion inwardly to produce at least one longitudinal pleat and a first folded end and a second folded end;

drawing the first and second folded ends of the airbag cushion toward each other to position them directly opposite the airbag inflator;

rolling the first folded end of the airbag cushion toward the airbag inflator to produce a first roll fold; and

rolling the second folded end of the airbag cushion toward the airbag inflator to produce a second roll fold, wherein the second roll fold encompasses the first roll fold.

Claim 35 (withdrawn): The overhead airbag module of claim 34, wherein the step of attaching the cushion throat of the airbag cushion to the inflator housing comprises at least partially encompassing the inflator housing with the cushion throat and attaching the cushion throat to the cushion attachment of the inflator housing.

Claim 36 (withdrawn): The overhead airbag module of claim 34, wherein the step of tucking the inboard and outboard faces of the airbag cushion inwardly to produce at least one longitudinal pleat is repeated to produce a plurality of longitudinal pleats.

Claim 37 (withdrawn): The overhead airbag module of claim 36, wherein 2 longitudinal pleats are produced.

Claim 38 (withdrawn): The overhead airbag module of claim 34, wherein the step of rolling the first folded end of the airbag cushion toward the inflation orifice comprises rolling the first folded end against the windshield face of the airbag cushion.

Claim 39 (withdrawn): The overhead airbag module of claim 34, wherein the step of rolling the second folded end of the airbag cushion toward the inflation orifice comprises rolling the first folded end against the occupant face of the airbag cushion.